

## REMARKS

In the foregoing amendments, claims 15, 16, 18-23, 25-28, and 30 were amended, while claims 17, 24, and 29 were canceled. Claims 1-14 were previously canceled. Accordingly, claims 15, 16, 18-23, 25-28, and 30 are pending in the application at this time.

Claims 18, 19, and 21 were rewritten as independent claims, including the limitations of claim 17 from which they depended. The outstanding Office action objected to claims 18, 19, and 21 as containing allowable subject matter, but as being depended upon a rejected claim 17. The Official action stated that claims 18, 19, and 21 would be allowable if rewritten in independent form including all the limitations of the base claim (claim 17) and any intervening claims (none). Since the foregoing amendments so rewrite claims 18, 19, and 21 as independent claims, a formal allowance of these claims is respectfully requested. The Official action allowed claims 27 and 28. Minor editorial changes were made to these claims in the foregoing amendments that do not change the subject matter of these claims. Accordingly, a formal allowance of claims 18, 19, 21, 27, and 28 is respectfully requested.

The foregoing amendments include editorial changes to the remaining claims 15, 16, 20, 22, 23, 25, 26, 29, and 30. These claims were also amended to further define that the communication device of the present invention is concerned with a construction machine and is provided within the construction

machine, among other things. The specific amendments to these claims will be discussed in more detail below. An allowance of claims 15, 16, 20, 22, 23, 25, 26, 29, and 30 is respectfully requested for at least the following reasons.

The Official action included two separate rejections of claims 15, 16, 29, and 30 under 35 U.S.C. §103(a) as being unpatentable over U.S. patent No. 5,588,005 of Ali *et al.* (Ali). These rejections are set forth on pages 2-6 of the Official action. Claims 17, 20, and 22-26 were rejected under 35 U.S.C. §102(b) as being anticipated by Ali. This rejection is set forth on pages 7-10 of the Official action. Applicant respectfully submits that claims 15, 16, 20, 22, 23, 25, 26, 29, and 30 are patently distinguishable from the teachings of Ali within the meaning of 35 U.S.C. §102(b) and 35 U.S.C. §103(a) for at least the following reasons.

The teachings of Ali do not contemplate or suggest the basic subject matter of the applicant's claimed invention, which is directed to a communication device that communicates with other devices and construction machines and is provided within the construction machine. While the teachings of Ali propose that the invention therein relates to asset tracking and, more particularly, the tracking of assets, including goods and vehicles, there is no mention of construction machines within these teachings. A construction machine and construction sites have specific characteristics that are different from other vehicles, including the vehicles proposed within the teachings of Ali, and therefore, the teachings of Ali would not motivate one of

ordinary skill in the art to somehow modify the device proposed therein so as to arrive at the presently claimed invention. For example, a construction machine has the characteristic that its resting time is much longer than a working time. If the aggregate of many construction machines are taken into consideration in and about a construction site, there are construction machines that are resting for long periods of time that need not be monitored, and construction machines that are continuously and fully working at a work site that must necessary be monitored constantly. Therefore, if a period for communications between construction machine(s) and a terminal device is changed by remote control according to the necessity of monitoring these plural construction machines, it is possible to save power and reduce the communication charges as viewed from the aggregate of the construction machines. Further, since it is not necessary to go to the plural construction machines to change the communication period, the workload can be reduced.

Applicant respectfully submits that the limitations in the present claims concerning the arrangement of the communication device in a construction machine, either in the preamble or body of the claim distinguishes the presently claimed invention from the teachings of Ali. Applicant respectfully submits that the limitations in the present claims defining a communication device of a construction machine for communicating between the construction machine and a terminal device, as well as various structures such as a communication device and location detecting means provided in the

construction machine distinguishes the presently claimed invention from the teachings of Ali. If it is determined that limitations in the preamble of a claim are necessary to give meaning to the claim and properly define the invention, then such limitations must be considered when determining the patentability of the claims. The predecessor court of the Court of Appeals for the Federal Circuit (CAFC), namely, the Court of Custom and Patent Appeals (CCPA) summarized this approach in *Kropa v. Robie*, 88 USPQ 478 (1951), after reviewing some 37 cases that turned on the limiting nature of the preambles to the claims in suit. See also *Loctite Corp. v. Ultraseal Ltd.*, 228 USPQ 90, 94 (Fed. Cir. 1985). According to the court in *Kropa*,

the preamble has been denied the effect of a limitation where . . . the claim or [interference] count apart from the introductory clause completely defined the subject matter [of the invention], and the preamble merely stated a purpose or intended use of that subject matter. On the other hand, in those . . . cases where the preamble to the claim or count was expressly or by necessary implication given the effect of a limitation, the introductory phrase was deemed essential to point out the invention defined by the claim or count. In the latter class of cases, the preamble was considered necessary to give life, meaning and vitality to the claims or counts.

Applicant respectfully submits that the limitations in present claims 15, 16, 20, 22, 23, 25, 26, and 30 defining a communication device of a construction machine for communicating between the construction machine and a terminal device, as well as the various structures such as a communication device and location detecting means provided in the construction machine, distinguish the presently claimed invention from the

teachings of Ali. Therefore, applicant respectfully requests that the examiner reconsider and withdraw the rejections of these claims.

With respect to claims 20 and 23, applicant respectfully submits that construction machines normally operate at a specific area (work site) and do not move far from the work site unless a specific circumstance occurs. Therefore, if a location of a construction machine is changed, it is an abnormal situation and thus it is necessary to inform the administrator of the location of the construction machine at that time to prevent robbery. Similarly, with respect to claimed 22, when a battery voltage is low, communication becomes difficult and thus it becomes impossible to cope with the occurrence of robbery. Therefore, if a voltage of a power source of a construction machine is low, it is an abnormal situation and it is necessary to inform the administrator of the location of that time to prevent robbery. Due to the fact that claims 20, 22, and 23 are concerned with the structure within construction machines and deal with situations particular to construction machines, which are not contemplated or suggested by the teachings of Ali, applicant respectfully submits that the inventions claimed therein are distinguishable from these teachings. Therefore, applicant respectfully requests that the examiner reconsider and withdraw all the rejections of applicant's claims over the teachings of Ali.

The limitations in claims 15, 16, 20, 22, 23, 25, 26, and 30 defining a communication device of a construction machine for communicating between

the construction machine and a terminal device, as well as various structures such as a communication device and location detecting means provided in the construction, machine requires that a current location of the construction machine is acquired at the terminal device side, even when the location information is not requested from a terminal device to a construction machine. As set forth in these claims, when a parameter in the construction machine has attained a specified value that indicates a danger of occurrence of robbery, the location of the construction machine is sent. This makes it possible to securely recognize an abnormal situation that the robbery of the construction machine has occurred, which situation cannot be monitored constantly at the terminal device side. This arrangement and function are not contemplated or suggest by the teachings of Ali. Therefore, the invention set forth in claims 15, 16, 20, 22, 23, 25, 26, and 30 are necessarily distinguishable from the teachings of Ali, and the rejection of these claims over the teachings of Ali should be withdrawn.

The teachings of Ali do not contemplate or suggest the subject matter of claims 25 and 26 where information is automatically sent each time a construction machine enters or exits to or from specified areas, such as a work site and a business office. The administration areas of construction machines are established at a business office and a work site construction sites. According to the invention set forth in claims 25 and 26, information is automatically sent to a terminal device at the administrator side when a

construction machine exits the administration area or enters into the administration area. Therefore, it is possible to easily determined on the administrator side that the construction machine exists in a normal administration area or an abnormal situation and that the construction machine is out of the management area. If a construction machine exists at a place other than these specified areas, an increased possibility that an abnormal situation has occurred, such as where the construction machine is being illegally transported. These aspects of applicant's claimed invention defined structure and function that is particular to construction machines, which cannot be contemplated or suggested by the teachings of Ali. Therefore, applicant respectfully submits that claims 25 and 26 are patently distinguishable from the teachings of Ali.

Claim 30 defines a plurality of construction machines, which can include are construction machines that are resting for a long period of time that need not be monitored, and construction machines that are continuously and fully working at a work site and must necessarily be monitored constantly. Therefore, if a period for communications between construction machines and a terminal device is changed by remote control according to the necessity of monitoring these plurality of construction machines, it is possible to save power and reduce the communication charges as viewed from the aggregate of the construction machines. Further, since it is not necessary to go to the plurality of construction machines to change the communication period, the

workload can be reduced. The teachings of Ali do not remotely contemplate or suggest these structures and function of the presently claimed invention, and therefore cannot contemplate or suggest the invention as set forth in present claim 30.

The teachings of Ali do not contemplate or suggest other subject matters of applicant's claimed invention. Please consider the limitations of claim 15. Normally, a construction machine operates at a specified work site or is stored at a business office. Thus, unless an abnormal situation such as a robbery occurs, the construction machine is not typically move from the specified place. If the construction machine strays from the normal location, it means that an abnormal situation has occurred, and therefore it is necessary to successively inform the administrator side of detailed information such as a current location, etc. by increasing an opportunity (time) to communicate with a terminal device at the administrator side as the construction machine strays from the normal location. Further, it is also considered to be an abnormal situation if the construction machine approaches an abnormal location such as a dangerous area, and therefore it is also necessary to successively inform the administrator side of detailed information such as a current location, etc. by increasing an opportunity (time) to communicate with the terminal device at the administrator side as the construction machine approaches the abnormal location. Present claim 15 defines structure for successively informing the administrator side of detailed information such as a current location, etc. by

increasing an opportunity (time) to communicate with a terminal device at the administrator side as the construction machine strays from the normal location or as the construction machine approaches to the abnormal location. Conversely, the teachings of Ali simply propose activating a communication device during a sleep period to transmit positional data from a vehicle or a container located on a train to a central station. For these reasons, applicant respectfully submits that the teachings of Ali do not contemplate or suggest the invention as set forth in present claim 15, and therefore it is respectfully requested that the examiner reconsider and withdraw the rejection of this claim over the teachings of Ali.

Similarly, a construction machine normally runs at a low speed in a work site, and hence it is considered to be an abnormal situation if the construction machine runs at a high speed on a highway etc., such as when it is stolen and loaded on a trailer. For such reasons, it is necessary to successively informing the administration side of detailed information such as a current location, etc. by increasing an opportunity (time) to communicate with the terminal device at the administration side as a moving speed of the construction machine becomes faster, as required in present claim 16. The teachings of Ali simply propose activating a communication device during a sleep period to transmit positional data from a vehicle or a container located on a train to a central station. The teachings of Ali do not contemplate or suggest a structure for successively informing the administrator side of detailed information such as a

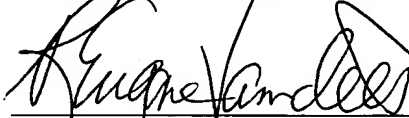
current location, etc. by increasing an opportunity (time) to communicate with a terminal device at the administrator side as a moving speed of the construction machine becomes faster, as required in present claim 16. Therefore, it is respectfully requested that the examiner reconsider and withdraw the rejection of this claim over the teachings of Ali.

For all the foregoing reasons, applicant respectfully submits that the teachings of Ali cannot disclose or suggest the invention as set forth in claims 15, 16, 20, 22, 23, 25, 26, 29, and 30 within the meaning of 35 U.S.C §102(b) or 35 U.S.C §103. Therefore, applicant respectfully requests that the examiner reconsider and withdraw the rejections of these claims over these teachings.

The foregoing is believed to be a complete and proper response to the Official action mailed June 21, 2004. While it is believed that all the claims in this application are in condition for allowance, should the examiner have any comments or questions, it is respectfully requested that the undersigned be telephoned at the below listed number to resolve any outstanding issues.

In the event that this paper is not timely filed, applicant hereby petitions for an appropriate extension of time. The Commissioner is hereby authorized to charge the fee therefor, as well as any deficiency in the payment of the required fee(s) or credit any overpayment, to our Deposit Account No. 22-0256.

Respectfully submitted,  
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